

Revision Date: 2009-06-10

Reason for Revision: 29 CFR 1910.1200 and SOR/88-66 Compliance

SECTION 1: IDENTIFICATION OF THE PRODUCT AND COMPANY

Product Name: HI 70446 Fehling Solution A

Application: For Chemical Analysis

Company Information (USA):

Hanna Instruments, Inc.
584 Park East Dr, Woonsocket, Rhode Island, USA 02895

Technical Service Contact Information:

1-800-426-6287 (8:30AM - 5:00PM ET)
+1-401-766-4260 (8:30AM - 5:00PM ET)

USA Emergency Contact Information:

1-800-424-9300 (Chemtrec 24Hr. Emergency)

International Emergency Contact Information:

+1-703-527-3887 (Chemtrec 24Hr. Emergency)

E-mail Address:

tech@hannainst.com

SECTION 2: HAZARD IDENTIFICATION

Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

SECTION 3: COMPOSITION AND COMPONENT INFORMATION

Component: Copper Sulfate Pentahydrate

EC-No.: 231-847-6

CAS-No.: 7758-98-7

Hazard: N, Xn, Xi

Phrases: R: 22-36/38-50/53

Content: > 2.5% - < 20%

SECTION 4: FIRST AID MEASURES

After Inhalation: Remove to fresh air.

After Skin Contact: Wash affected area with plenty of water. Remove contaminated clothing.

After Eye Contact: Rinse out with plenty of water for at least 10 minutes with the eyelid held wide open. Call in ophthalmologist.

After Swallowing: Make victim drink plenty of water. Call in physician.

General Information: Not available

SECTION 5: FIRE-FIGHTING MEASURES

Suitable Extinguishing Media:

Water spray, Carbon Dioxide, Dry Chemical Powder, Appropriate Foam.

Special Risks:

Non-combustible.

Special Protective Equipment:

Do not stay in dangerous zone without suitable chemical protection clothing and self-contained breathing apparatus.

Additional Information:

Contain escaping vapours with water. Prevent fire-fighting water from entering surface water or groundwater.

Safety Data Sheet

According to Regulation (EC) No. 1907/2006
OSHA Regulation 29 CFR 1910.1200
Canadian Regulation SOR/88-66

SECTION 6: ACCIDENTAL RELEASE MEASURES

Personal Precautions:

Do not inhale vapors/aerosols. Avoid substance contact. Ensure supply of fresh air in enclosed rooms.

Environmental Precautions:

Take up with liquid-absorbent material.

Additional Notes:

None

SECTION 7: HANDLING AND STORAGE

Handling:

Do not inhale substance. Avoid generation of vapours/aerosols.

Storage:

Tightly closed. Store at room temperature (+15 to +25 °C recommended).

SECTION 8: EXPOSURE CONTROL/PERSONAL PROTECTION

Engineering:

Maintain general industrial hygiene practice.

Personal Protective Equipment:

Protective clothing should be selected specifically for the working place, depending on concentration and quantity of the hazardous substances handled. The resistance of the protective clothing to chemicals should be established with the respective supplier.

Respiratory Protection:

Required when vapors/aerosols are generated. Work under hood.

Protective Gloves:

Rubber or plastic

Eye Protection:

Goggles or face mask

Industrial Hygiene:

Immediately change contaminated clothing. Application of skin-protective barrier cream recommended. Wash hands after working with substance.

SECTION 9: PHYSICAL/CHEMICAL PROPERTIES

Appearance: Blue liquid

Odor: Odorless

Density at 20° C: 1.04 g/cm³

Melting Point: ND

Boiling Point: ND

Solubility: Soluble

pH at 20° C: < 2

Explosion Limit: NA

Flash Point: NA

Thermal Decomp.: NA

SECTION 10: STABILITY AND REACTIVITY

Conditions to be Avoided:

Heating

Hazardous Polymerization:

Will not occur.

Further Information:

Not available

Hazardous Decomposition Products:

In the event of fire: See section 5.

Substances to be Avoided:

Hydroxylamine, The generally known reaction partners of water

SECTION 11: TOXICOLOGICAL INFORMATION

Product Toxicity

Quantitative data on the toxicity of this product is not available.

Potential Health Effects:

Further Data: Hazardous properties cannot be excluded, but are relatively improbable due to the low concentration of the dissolved substance(s).

Component Toxicity

Acute Toxicity:

Not Available

Chronic Toxicity:

Not Available

Additional Data:

Not Available

SECTION 12: ECOLOGICAL INFORMATION

Quantitative data on the ecotoxicity of this product is not available.

APPLICABLE TO MAIN COMPONENT:

The following applies to Copper Sulphate, as the pure substance:

Ecotoxic effects:

Biological effects: Harmful effect on aquatic organisms. May cause long-term adverse effects in the aquatic environment.

Fungicidal effect.

Fish toxicity: *L. idus* LC50: 0.8 mg/L (calculated on the pure substance). Daphnia toxicity: *Daphnia magna* EC50: 0.024 mg/L /48 h (calculated on the pure substance).

Algal toxicity: *Sc. quadricauda* EC50: 0.1 mg/L /4 h (calculated on the pure substance).

Further Data: DO NOT ALLOW TO ENTER WATERS, WASTE WATERS, OR SOIL!

SECTION 13: DISPOSAL CONSIDERATIONS

Waste Disposal: Chemical residues are generally classified as special waste and thus covered by local regulations. Contact local authorities or disposal companies for advice. Handle contaminated packaging in the same way as the substance itself.

SECTION 14: TRANSPORTATION INFORMATION

Land:

ADR/RID:9, III
UN-No.:3082
Name :ENVIRONMENTALLY
HAZARDOUS SUBSTANCE, LIQUID,
N.O.S. (COPPER (II) SULPHATE
SOLUTION)

Sea:

IMDG:8/UN 1805/PG III
Name:ENVIRONMENTALLY
HAZARDOUS SUBSTANCE, LIQUID,
N.O.S. (COPPER (II) SULPHATE
SOLUTION)
Marine Pollutant:PP
EMS:F-A S-F

Air:

ICAO/IATA:8/UN 1805/PG III
Name:ENVIRONMENTALLY
HAZARDOUS SUBSTANCE, LIQUID,
N.O.S. (COPPER (II) SULPHATE
SOLUTION).

Transport data applies to the COMPLETE KIT!

SECTION 15: REGULATORY INFORMATION

Labeling according to EC Directives:

Symbol: N: Dangerous for environment

R-phrases: 51/53: Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

S-phrases: 61: Avoid release to the environment. Refer to special instructions/Safety data sheets.

Safety Data Sheet

According to Regulation (EC) No. 1907/2006
OSHA Regulation 29 CFR 1910.1200
Canadian Regulation SOR/88-66

SECTION 16: OTHER INFORMATION

Text of R-phrases under Section 3

22:Harmful if swallowed.
36/38:Irritating to eyes and skin.
50/53:Very toxic to aquatic organisms, may
cause long-term adverse effects in the aquatic
environment.

Revision Information

Revision Date: 2009-06-10
Supersedes edition of: 2008-12-01
Reason for revision: 29 CFR 1910.1200 and SOR/88-66
Compliance

Legend

NA: Not Applicable
ND: Not Determined

**THE INFORMATION CONTAINED HEREIN IS BASED ON THE PRESENT STATE OF OUR
KNOWLEDGE. IT CHARACTERIZES THE PRODUCT WITH REGARD TO THE
APPROPRIATE SAFETY PRECAUTIONS. IT DOES NOT REPRESENT A GUARANTEE OF
THE PROPERTIES OF THE PRODUCT.**